## CLAIMS

5

10

30

1. A method of colour matching comprising the steps of:

sensing colour information representative of an article being sampled, with a portable user device (10) having an optical sensor (11);

generating a colour definition data file (14,19,20) from said colour information:

transmitting said colour definition data file to a remote database (30,42,43,44);

searching the database for data items that match colour criteria indicated by the transmitted colour definition data;

generating a list of said data items; and transmitting said list of data items to the user device.

- 15 2. The method of claim 1 in which the sensing step includes directing a digital camera (11) at at least a portion of the article to form an image thereof and defining a target region of the image for which target region the colour information is to be sampled.
- 3. The method of claim 2 further including determining an average of the sensed colour information or a representative colour set, for use in generating the colour definition data file.
- 4. The method of claim 1 in which the sensing step further includes determining a temperature of the light illuminating the colour image.
  - 5. The method of claim 4 in which the step of generating a colour definition data file (14, 19, 20) includes incorporating temperature of the light illuminating the image that produced the colour definition data file.
    - 6. A method of colour matching comprising the steps of:

5

10

15

20

25

30

sensing colour information representative of an article being sampled, with a portable user device (10) having an optical sensor (11);

generating a colour definition data file (14,19,20) from said colour information;

transmitting said colour definition data file to a remote database (30,42,43,44);

receiving from the remote database a list of one or more data items (each relating to an article) that matches colour criteria indicated by the transmitted colour definition data; and

providing as output to a user the one or more data items in the list on the portable user device.

7. The method of claim 6 further including the steps of:

receiving product location information with each of the received data items; and

providing as output said product location information on the portable user device.

8. A method of colour matching comprising the steps of:

receiving a colour definition data file (14,19,20) including colour information representative of a sampled article, from a portable user device;

searching a database (30,42,43,44) for data items that match colour criteria indicated by the transmitted colour definition data;

generating a list of one or more data items each relating to an article that matches colour criteria indicated by the received colour definition data file; and

transmitting said list of data items to the user device (10).

9. A method of colour matching using a portable colour matching device (10), comprising the steps of:

sensing colour information representative of the colour of an article being sampled with an optical sensor (11);

generating a colour definition data file (14) from said colour information; storing a plurality of colour definition data files (19,20) relating to previously sampled objects;

receiving a colour definition data file (14) relating to a current sampled article, and searching colour definition data files in the memory to determine if any of the stored files (19, 20) match colour criteria indicated by the colour definition data (14) for a current sample; and

providing as output on the colour matching device an indication if any stored files match the colour criteria.

10

15

20

5

10. A portable colour sampling device (10) comprising:

an optical sensor (11) for sensing colour information representative of the colour of an article being sampled;

means (12) for generating a colour definition data file (14,19,20) from said colour information;

a wireless transmitter (22) for transmitting said colour definition data file to a remote database (30,42,43,44); and

a wireless receiver for receiving (22), from said remote database, a list of data items that match colour criteria indicated by the transmitted colour definition data.

11. The sampling device of claim 10 in which the optical sensor (11) further includes means for determining the temperature of the light used to illuminate the colour image.

25

30

- 12. The sampling device of claim 10 further including means for transmitting, with the colour definition data file, an indication of current location of the sampling device.
  - 13. A colour matching server (40, 41) comprising:

5

10

15

20

25

means for receiving, from a portable colour sampling device a colour definition data file (14,19,20) indicating sensed colour information representative of the colour of an article;

a database of data items (42,43,44), each data item relating to an article and one or more colour properties of that article;

a search engine for receiving the colour definition data file and locating, in the database, data items that match colour criteria indicated by the transmitted colour definition data;

means for generating a list of said data items; and means for transmitting said list of data items to the portable colour sampling device.

- 14. The colour matching server of claim 13 in which each data item further includes data identifying an indication of retail location of the respective article.
  - 15. A portable colour sampling device (10) comprising:

an optical sensor (11) for sensing colour information representative of the colour of an article being sampled;

means (12) for generating a colour definition data file (14) from said colour information;

a memory (18) for storing a plurality of colour definition data files (19,20) relating to previously sampled objects;

a comparison engine for receiving a colour definition data file (14) relating to a current sampled article, and for searching colour definition data files (19,20) in the memory to determine any of the stored files which match colour criteria indicated by the colour definition data for a current sample; and

means for indicating determined stored files that match the colour criteria.